



Session 1 speaker:

The new Water Framework Directive and Groundwater Directive: an ecotoxicologist's perspective

Thomas Backhaus, Professor, University of Gothenburg, Sweden

Thomas Backhaus is Professor for environmental sciences at the University of Gothenburg, mainly working on the environmental risk of chemicals of emerging concern with a special focus on combination effects and regulatory ecotoxicology. He is a member of the EU Commission's Scientific Committee on Health Environmental and Emerging Risks (SCHEER) and the Swedish Toxicological Council (Toxrådet). Additionally, he is a boardmember of two foundations working on the assessment of chemical risks, the Food Packaging Forum (FPF) and the International Panel on Chemical Pollution (IPCP). Thomas also serves as senior editor of 'Integrated Environmental Assessment and Management'. As per usual, Thomas spends his time teaching, learning (far too little), research (chemical risk assessment, chemical regulation and big data in ecotoxicology), and writing stuff.

Short abstract

The EU Commission recently published its proposal for amending three central water management Directives: the Water Framework Directive, the Groundwater Directive, and the Directive on Environmental Quality Standards. The proposal introduces a series of amendments and changes to remedy shortcomings that were identified in the previous fitness check of the European water legislation and to align the legal framework with scientific and technical progress. This presentation will begin by briefly reviewing the fundamental setup of the different pieces of European water legislation and how it links to substance-oriented regulations such as REACH. Afterwards, the presentation will summarize and evaluate those new elements that are most relevant from a toxicological and ecotoxicological perspective. This includes (1) the new priority substances, (2) the corresponding Quality Standards and Environmental Quality Standards, (3) the updated watchlist, (4) the consideration of mixture effects, (5) the use of effect-based methods, and (6) the implementation of the 'one substance, one assessment' philosophy that is an integral part of the Chemicals Strategy for Sustainability. The Commission proposal modernizes the regulatory framework for water management in Europe, which is much welcome. However, its implementation is not always consistent, and sometimes lags behind the scientific state of the art.